JOURNAL OF FORENSIC SCIENCES

Official Publication of the American Academy of Forensic Sciences

Editor

Samuel A. Levinson, M.D., Ph.D.

Associate Editor

Morton F. Mason, Ph.D.

Editorial Consultants

Donald Doud
George E. Hall, J.D.
Theodore J. Curphey, M.D.
Mary E. Cowan, B.Sc.
Dwight M. Palmer, M.D.
Phillip Sturgeon, M.D.

VOLUME 8
January to October
1963

Publishers

CALLAGHAN AND COMPANY
165 North Archer Avenue
Mundelein, Illinois

COPYRIGHT © 1962, BY CALLAGHAN & COMPANY

JOURNAL OF FORENSIC SCIENCES
VOL. 8, NO. 1

COPYRIGHT © 1963, BY CALLAGHAN & COMPANY

JOURNAL OF FORENSIC SCIENCES
VOL. 8, NOS. 2–4

COPYRIGHT © 1963, BY CALLAGHAN & COMPANY
ALL RIGHTS RESERVED

Table of Contents of Volume 8

Number 1

PAGE

The Medicolegal Diagnosis of Death by Drowning..... 1
Frederic Thomas, M.D., W. Van Hecke, M.D., and J. Timperman, M.D.

The Meaning of "Cause of Death"..... 15
Milton G. Bohrod, M.D.

Sudden Death in the Hyper-Reactor State..... 22
Milton G. Bohrod, M.D.

Detection of Toxic Compounds in Humans and Animals by Rapid Infrared Techniques..... 31
Richard D. Stewart, M.D. and Duncan S. Erley, M.Sc.

Detection and Estimation of Toxicologically Significant Amounts of Borate, Chlorate and Oxalate in Biologic Material 46
F. Rieders, Ph.D. and F. J. Frere, Ph.D.

Identification of Glass Fragments by Measurement of Refractive Index and Dispersion..... 54
Donald G. Grabar and Andrew H. Principe, B.Sc.

A Punchcard System for Identification of Typescript.... 68
Cpl. J. H. Hodgins

Forensic Neuropathology
VII. Changes in the Brain Incident to Extreme Variations in Temperature, Barometric Pressure, Electrical Current, and X-Radiation..... 82
Cyril B. Courville, M.D.

Traumatic Subarachnoid Hemorrhage in Alcohol Intoxication 97
J. Simonsen, M.D.

PAGE

Technical Section

Simple Power Sources for Electrophoresis..... 117
David A. Crown, M.Crim.

Narcotics Analysis—A Simple Approach..... 126
Melvin Lerner, B.S., Albert L. Mills, B.S. and Sally F. Mount, A.B.

Current Topics

Maternal Aspiration of Amniotic Fluid..... 132
Lester Adelson, M.D.

Book Reviews 137

Number 2

A Study of Some Factors Affecting the Accuracy of the Breathalyzer 149
B. B. Coldwell, Ph.D. and G. L. Grant

A Survey of Toy Typewriters, 1961..... 163
Simeon Wilson

Forensic Neuropathology

VIII. The Mechanism and Structural Effects of Poisons Upon the Brain..... 179
Cyril B. Courville, M.D.

Dying and Death..... 200
Philipp R. Rezek, M.D.

Use of Paper Chromatographic Technics on Urine for Evaluating Narcotic Usage by the Nalorphine Pupil Test 209
Shih-Chia Chen Lin, Ph.D. and E. Leong Way, Ph.D.

The Disappearance of Alcohol from the Blood of Diabetics 220
B. B. Coldwell, Ph.D. and G. L. Grant

The Forensic Pathologist and the Unsuspected Foreign Body 231
Joe M. Blumberg, Colonel, M.C. and Edward H. Johnston, Lt. Colonel, M.C.

PAGE

Frequency of Certain Characteristics in Handwriting, Pen-Printing of Two Hundred People..... 250
Orville B. Livingston

Technical Section

Determination of Hydrocarbons in Fire Remains.... 261
Bruce V. Ettling, B.S., M.S., Ph.D.

Comparison of Inks by Paper Chromatography..... 268
P. S. Raju, M.Sc., R. C. Banerjee, B.Sc., and N. K. Iyengar, M.Sc., Ph.D., F.A.Sc.

The Practice of Identification in Analytical Toxicology 286
Leo R. Goldbaum, Ph.D., Edward H. Johnston, Lt. Colonel, M.C. and Joe M. Blumberg, Colonel, M.C.

Current Topics

Reconstruction of an Arsenic Poisoning..... 295
D. Bradwell, F.R.I.C.

A Pictorial Guide for the Identification of Solid Dosage Forms..... 303
R. C. Gupta and J. Kofoed

Book Reviews 309

Number 3

The Forensic Scientist in Court..... 315
Fred M. Miller, Ph.D.

Credibility of a Witness..... 325
Maier I. Tuchler, M.D.

Legal Commentaries on the Forensic Scientist in Court.. 339
Robert J. Joling, A.B., LL.B.

An Introduction to Demonstrative Evidence..... 355
Melvin M. Belli, LL.B.

Medicine and Criminalistics..... 383
Jan S. Olbrycht, M.D.

PAGE

Forensic Neuropathology
IX. Central Effects of Poisoning from Some Common Drugs 392
Cyril B. Courville, M.D.

Modified Absorption-Elution Method of Siracusa for ABO and MN Grouping of Bloodstains ..... 41[illegible]
A. Fiori, M. Marigo and P. Benciolini

(To Be Continued in October 1963 Issue)

The Haptoglobins of Human Serum 446
Eloise R. Giblett, M.D.

Medical Records and the Questioned Document Examiner 453
John J. Harris, A.B., and Don Harper Mills, M.D., LL.B.

Technical Section
Useful Tests to Identify Phenothiazine Tranquillizers 462
George H. W. Lucas, Ph.D., and C. Fabierkiewicz, M.D.

Identification of Nasal Inhaler Fragments by Gas Chromatography 477
Clifford C. Cromp, B.A.

Number 4

Index Number

Forensic Neuropathology
X. Common Chemical, Metallic, and Metalloid Poisons 481
Cyril B. Courville, M.D.

Vitreous Potassium Concentration as an Indicator of the Postmortem Interval 503
Lester Adelson, M.D., Irving Sunshine, Ph.D., Norman B. Rushforth, Ph.D., and Mark Mankoff, A.B.

Child Molesters and Men Who Expose Themselves—An Anthropological Approach 515
Werner Tuteur, M.D.

The Determination of Imipramine in Biologic Material.. 526
Leo A. Dal Cortivo, M.S., Philip Giaquinta, B.S., and Charles J. Umberger, Ph.D.

PAGE

Modified Absorption-Elution Method of Siracusa for ABO and MN Grouping of Bloodstains 535
A. Fiori, M. Marigo and P. Benciolini

(Continued from July 1963 Issue)

Research on Huntington's Chorea: Problems of Privilege and Confidentiality 568
John R. Whittier, M.D.

The Identification of Impressions of Nonfriction-Ridge-Bearing Skin 576
Duayne J. Dillon, M.Crim.